

We claim:

1. Method of monitoring a fluid pressure of a tire with a sensor, disposed in conduit assemblies for conducting fluid to or from the tire, of a tire pressure management system comprising:
providing a pulse of compressed fluid to the conduit assemblies, unless a counter exceeds a count, the fluid in the conduit assemblies thereafter having a conduit pressure;
wherein the pulse has a duration that corresponds to a ratio defined by a first predetermined amount divided by a second predetermined amount.

2. Method of claim 1, wherein the first predetermined amount corresponds to a pressure shortfall with respect to the target pressure in the conduit assemblies.

3. Method of claim 1, wherein the first predetermined amount corresponds to a target pressure less the conduit pressure prior to said providing.

4. Method of claim 1, wherein the second predetermined amount corresponds to a pressure increase realized from the a pulse of compressed fluid introduced into the conduit assemblies prior to said providing.

5. Method of claim 1, wherein the second predetermined amount corresponds to the conduit pressure prior to said providing less a pressure increase realized from a pulse of compressed fluid introduced to the conduit assemblies prior to said providing.

6. Method of claim 1, wherein the duration corresponds to a duration of a pulse of compressed fluid introduced to the conduit assemblies prior to said providing.

7. Method of claim 1, further comprising repeating said providing until the conduit pressure equals or exceeds the target pressure.

1 8. Method of claim 1, further comprising repeating said providing until the conduit
2 assemblies and the tire are in fluid communication or equilibrium.

1 9. Method of claim 1, wherein said providing increases fluid pressure in the tire or is
2 sufficient to initiate fluid communication among, via a valve interposed between, the conduit
3 assemblies and the tire.

1 10. Method of claim 1, further comprising determining whether the difference between
2 the conduit pressure and the pressure of the fluid in the conduit following a stabilization period
3 exceeds a limit.

1 11. Method of claim 10, wherein the stabilization period is sufficient to ascertain
2 whether a leak exists in the conduit assemblies.

1 12. Method of claim 10, further comprising logging a leak fault if the difference exceeds
2 the limit.

1 13. Method of claim 10, further comprising defining the current tire pressure as equal to
2 the conduit pressure if the difference does not exceed the limit.

1 14. Method of claim 1, wherein the counter registers each occurrence of said providing.

1 15. Method of claim 1, further comprising clearing the counter when the conduit pressure
2 equals or exceeds the predetermined amount.

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